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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,160	12/30/2003	Jean-Jacques Katz	04356 (3883.00031)	7806

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LEAR CORPORATION, BLISS MCGLYNN, P.C.
2075 WEST BIG BEAVER ROAD
SUITE 600
TROY, MI 48084

EXAMINER

MUSSER, BARBARA J

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,160

Applicant(s)

KATZ ET AL.

Examiner

Barbara J. Musser

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 11-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 11, it is unclear what is meant by "mastic" as the specification does not define it. The specification indicates the mastic layer is often bituminous and acts to block exterior noise[0024] but does not indicate these are requirements. It also suggests the mastic can be non-tacky(claim 12) requiring an adhesive to bond it to the other layers(claim 13) while the dictionary definition of a mastic is a pasty substance, which one would think would be tacky since it was fluid. For the purposes of examination, a mastic is considered to be any material which can act to bond the organic and scrim layers together. It is unclear what is required by "shoddy" as applicant's specification does not define in relation to the invention. The only description of the bottom layer is an organic material having fibers. The only definition of shoddy is that "traditionally" shoddy is made of cloth or fibrous remnants that are bonded or needled together. Therefore it is unclear whether the shoddy layer can be made of fabric remnants, fiber remnants, or needled fibrous bats. For the purposes of examination, shoddy is considered to be any fabric layer or fibrous layer which is bonded or needled together.

Regarding claim 18, it is unclear if a step is missing as there is no "and" before the last step, suggesting more steps.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 11-13 and 15 are rejected under 35 U.S.C. 102(a) as being anticipated by, or in the alternative, under 103(a) as obvious over Allison et al.(U.S. Publication 2003/0066708A1).

Allison discloses forming a sound attenuating layer for vehicles by bonding together a fiber batting(12), a thermoplastic layer(14), a thermoplastic layer(16), and a scrim(18). The two thermoplastic plastic layers are considered the mastic layer as they are pasty materials which act as a hot melt to bond the batting and scrim together.([0028]-[0029], [0035]) Since these types of materials are intended for use in automobiles to attenuate sound, one in the art would understand that they would be capable of being employed in the headliner of the vehicle wherein they would be covered with a non-carpeted material. As applicant has not defined what is required by a scrim layer to make it "adapted to operatively engage a non-carpeted surface material" it is considered that all scrims would meet this claim limitation. The fiber

batting is considered to be a shoddy layer since it can be made of fibers.[0028] In any event, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the batting from recycled fibers since this would reduce costs and reduce waste.

Regarding claim 12, the thermoplastic layer(16) must be either tacky or non-tacky as there is no other alternative.

Regarding claim 13, Allison et al. discloses the batting and first and second thermoplastic layers can be fused together[0029-0030]. Fusing occurs by heating of one material.

Regarding claim 15, Allison et al. discloses the second thermoplastic layer(16) can be bonded to the scrim layer(18) via an adhesive.[0031]

5. Claims 11-13, 15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Haussling(U.S. Patent 4,828,910).

Haussling discloses a mat for uses in vehicles comprising a core(3), a fibrous mat impregnated with resin(mastic layer)(4), and a scrim(5). The core is made of thermoplastic fibers.(Col. 2, ll. 62-63) Since these types of materials are intended for use in automobiles to attenuate sound, one in the art would understand that they would be capable of being employed in the headliner of the vehicle wherein the scrim would contact a non-carpeted surface since the scrim is intended to be facing the roof. As applicant has not defined what is required by a scrim layer to make it "adapted to operatively engage a non-carpeted surface material" it is considered that all scrims

would meet this claim limitation. The fiber batting is considered to be a shoddy layer since it can be made of fibers.[0028]

Regarding claim 12, the resin impregnated mats must be either tacky or non-tacky as there is no other alternative.

Regarding claims 13 and 15, the layers bond together under heat and pressure(Col. 5, ll. 12-13; Col. 6, ll. 1-5, 26-28) with the resin impregnated in the mat bonding the layers together. Therefore the resin in the mat is heated to bond it to the other layers.

Regarding claim 17, since the decorative layer(1) is intended to be visible in the headliner, one in the art would understand that the scrim layer(5) is attached to the inside of the roof of the automobile since headliners are attached to the roof of the vehicle, and the roof is a non-carpeted surface material having two sides. It is noted that the specification only discloses that the A-side commonly refers to the side visible to the occupant, not that this is required. Additionally, since the scrim layer is attached to the interior of the roof, it is effectively attached to the B-side since the exterior of the roof is the side that is intended to be seen. It is noted that the phrase non-carpeted surface material only requires that the material the scrim is attached to not be carpet. It does not require a decorative material or even a fabric.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haussling as applied to claim 11 above.

The reference cited above does not disclose how the scrim layer(5) is attached to the roof of the vehicle. However, the use of adhesive to bond materials together is extremely well-known in the bonding arts, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply adhesive to either the scrim layer or to the roof to bond the headliner to the roof since the use of adhesives to bond materials together is extremely well-known in the bonding arts.

8. Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allison et al. as applied to claim 11 above, and further in view of Fujita et al.

The references cited do not disclose forming the shoddy by placing one layer in a mold, extruding the mastic layer onto the layer in the mold, and then applying the second layer to the mastic. Fujita et al. discloses bonding together layers in a automotive interior component by placing a first layer on a mold, extruding a bonding material, and applying a second layer to the boding material.(Abstract; Figure 2) It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply either the organic fine layer or the scrim to a mold, extrude the mastic material onto it, and then apply the other of the scrim and organic layer to the mastic since Fujita et al. shows this is a well-known method of bonding together components in

an automobile and because this allows bonding of porous materials without forcing the adhesive material through the porous material.(Col. 2, ll. 17-21)

Response to Arguments

9. Applicant's arguments filed 3/17/06 have been fully considered but they are not persuasive.

Regarding applicant's argument that the specification has defined "mastic", the specification has disclosed an example of what a mastic material is. The variety of meanings found for mastic, from thermosetting to thermoplastic to a solvent based material suggest that a mastic is simply an adhesive. If applicant intends the material to be primarily bituminous, it is suggested applicant amend the claims to positively recite bituminous.

Regarding applicant's argument that Allison does not disclose joining a shoddy bottom layer and a scrim top layer on either side of a mastic layer, applicant's specification indicates that a shoddy can be a fibrous material which is needled together, which is what a fibrous batting commonly is. As applicant has not claimed the mastic layer is bituminous, any material which bonds the layers together can be considered the mastic layer. As such the thermoplastic layers 14 and 16 are considered to comprise the mastic middle layer. The scrim layer(18) is clearly a scrim layer which is bonded to one side of thermoplastic layers.

Regarding applicant's argument that Allison and Haussling do not disclose a tri-partite composite, the claim is open, and thus more layers can be present.

Regarding applicant's argument that neither Allison nor Haussling disclose a scrim layer that is adapted to operatively engage a non-carpeted surface material, applicant has not defined what is required of a scrim layer to make it adapted to operatively engage a non-carpeted surface, and thus it is considered that any scrim layer is capable of such as the specification does not disclose specifics with regards to this feature.

Regarding applicant's argument that Haussling discloses the scrim material is furthest away from the B-side of the surface material, the claim does not require contacting the surface material, but simply that the scrim be capable of such, and the layer of Haussling is capable of such.

10. In response to applicant's argument that none of the references teach a composite shoddy that eliminates the need for a release liner, accommodates post-processing shrinkage, and enables in-mold bonding to the B-side of a surface, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara J. Musser whose telephone number is (571) 272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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BJM


SAM CHUAN YAO
PRIMARY EXAMINER